**Homework 41** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Complex Area** Period:\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   
**SHOW ALL WORK AND WRITE IN COMPLETE SENTENCES OR ELSE LASALLE. MUAHAHAHA.**

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| 1. Find the area of the shaded region. | 2. Find the area of the figure below. |
| 3. In the figure below, AEFB and EDCF are both squares, each with side lengths of 5 cm. What is the area of the UNSHADED region of the rectangle ADCB?  *A E D*        *B F C* | 4. What is the area of the shape below? Leave your answer in terms of pi.  40 ft  30 ft |
| 5. Find the area of the figure below. | 6. A rectangular flower bed is 8 × 10 feet. It is surrounded by a border of uniform width x feet, as shown in the figure below. If the area of the bordering region alone is 40 square feet, what is the value of x?  x    x   1. 1 B) 2 C) 3 D) 10 E) 11 |
| 7. What is the area of the entire hexagon? All measurements are in feet.  2    5 4 4 5    3 3  3 3  2 | 8. What is the area of the shaded region? Leave your answer in terms of pi.  6 ft  6 ft  8 ft  7 ft  10 ft |

|  |  |
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| 1) Simplify: | 2) Simplify: |
| 3) (-2 - 6*i*)(-8 - 4*i* ) | 4) Simplify: |
| 5) Find the value of x. | 6) In the figure below, all lines intersect at point X with angle measures as marked. What is the measure of AXC?  A B  F 46 X  C  53  E D |
| 7) Quadrilateral ABCD is a square. If *NAC* is 45° and *NCA* is 45°, what does *BND* equal?  *N*  *A*  *C*  *B*  *D*  A) 45°   1. 90° 2. 100° 3. 145° 4. 180° | 8) A restaurant occupying the top floor of a skyscraper rotates as diners enjoy the view. Ling and Sarah notice that they began their meal at 7:00 pm looking due north. At 7:45 pm they had rotated 180 to a view that was due south. At this rate, how many degrees will the restaurant rotate in 1 hour?   1. 90 2. 180 3. 240 4. 270 5. 400 |